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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,020	01/14/2002	Aaron Reel Bouillet	RCA 89648	4455

7590 02/07/2005

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EXAMINER
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TRAN, TRANG U

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/031,020

Applicant(s)

BOUILLET ET AL.

Examiner

Trang U. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/14/02</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipate by Krishnamurthy et al (US Patent No. 5,546,138).

In considering claim 1, Krishnamurthy et al discloses all the claimed subject matter, note 1) the claimed amplifying said television signal using a first amplification level in response to a control signal is met by the gain controlled amplifier 30 which is controlled by the AGC controller and charge pump 31, during the non-coherent AGC mode for the short period after the initial interval, which desired to operate the IF amplifier 30 at the maximum gain (Figs. 1-4, col. 3, line 1 to col. 6, line 29), 2) the claimed acquiring the carrier frequency from said amplified television signal is met by the IF amplifier and synchronous demodulator 20 (Figs. 2-3, col. 3, line 31 to col. 5, line 16 and col. 6, line 30 to col. 7, line 50), and 3) the claimed amplifying said television signal, after acquiring the carrier frequency, using a second amplification level, where said first amplification level is greater than said second amplification level is met by the gain controlled amplifier 30 which is controlled by the AGC controller, during the first non-coherent AGC mode the AGC system is operated at maximum gain which magnifies the DC pilot and aids in the acquisition of frequency lock, the gain in then

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decreased and during coherent (normal) operation of the AGC after sync lock has been attained, the IF gain is reduced to the nominal value (Figs. 1-4, col. 3, line 1 to col. 6, line 29).

In considering claim 2, Krishnamurthy et al discloses all the claimed subject matter, note 1) the claimed wherein said amplifying comprises: setting a reference power value to a high value is met by the decoder 70 which generates a Gain-Up signal which is applied to charge pump 31 (Figs. 1-4, col. 3, line 1 to col. 6, line 29), and 2) the claimed increasing a value of said control signal if said reference value is greater than a power value of said television signal, where the amplifying using said first amplification level occurs in response to the increased value of said control signal is met by when the integrated signal 76 falls below a second level, a Gain-Up signal is generated by decoder to increase the gain of amplifier 30 (Figs. 1-4, col. 3, line 1 to col. 6, line 29).

In considering claim 3, the claimed wherein said setting occurs in response to an input command is met by the user inputs from either a keyboard 14 or an IR receiver 16 (Fig. 1, col. 3, lines 1-30).

In considering claim 4, the claimed wherein said acquiring comprises: a detecting said pilot tone from said television signal is met by the IF amplifier and synchronous demodulator 20 (Figs. 2-3, col. 3, line 31 to col. 5, line 16 and col. 6, line 30 to col. 7, line 50).

In considering claim 5, the claimed wherein said amplifying after said acquiring comprises: setting a power reference value to a low value, said setting is provided in response after acquiring the carrier frequency is met by is met by the decoder 70 which

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generates a Gain-Down signal which is applied to charge pump 31 (Figs. 1-4, col. 3, line 1 to col. 6, line 29), and 2) the claimed decreasing a value of said control signal if said reference value is less than a power value of said television signal, where the amplifying using said second amplification level occurs in response to the decreased value of said control signal is met by when the integrated signal 76 exceeds a first level, a Gain-Down signal is generated by decoder to reduce the gain of amplifier 30 (Figs. 1-4, col. 3, line 1 to col. 6, line 29).

In considering claim 6, the claimed wherein said amplifying comprises: increasing a gain of an intermediate frequency (IF) module is met by when the integrated signal 76 falls below a second level, a Gain-Up signal is generated by decoder to increase the gain of amplifier 30 (Figs. 1-4, col. 3, line 1 to col. 6, line 29).

In considering claim 7, the claimed wherein said amplifying after said acquiring comprises: decreasing a gain of an intermediate frequency (IF) module is met by when the integrated signal 76 exceeds a first level, a Gain-Down signal is generated by decoder to reduce the gain of amplifier 30 (Figs. 1-4, col. 3, line 1 to col. 6, line 29).

In considering claim 8, the claimed further comprising: generating a carrier lock signal upon acquiring the carrier frequency, where said amplifying using said second amplification level occurs in response to said carrier lock signal is met by the segment sync generation 98 (Fig. 3, col. 4, line 64 to col. 6, line 29).

In considering claim 9, the claimed wherein said television signal comprises a received vestigial sideband (VSB) modulated signal containing high definition video data is met by the VSB signal (col. 2, lines 42-67).

In considering claim 10, Krishnamurthy et al discloses all the claimed subject matter, note 1) the claimed a tuner circuit for amplifying said television signal using a first amplification level and amplifying said television signal using a second amplification level, where said first amplification level is greater than said second amplification level is met by the tuner 10, the SAW filter and the gain controlled amplifier 30 which is controlled by the AGC controller and charge pump 31, during the first non-coherent AGC mode the AGC system is operated at maximum gain which magnifies the DC pilot and aids in the acquisition of frequency lock, the gain is then decreased and during coherent (normal) operation of the AGC after sync lock has been attained, the IF gain is reduced to the nominal value (Figs. 1-4, col. 3, line 1 to col. 6, line 29), 2) the claimed a carrier recovery circuit for acquiring the carrier frequency from said amplified television signal is met by the IF amplifier and synchronous demodulator 20 (Figs. 2-3, col. 3, line 31 to col. 5, line 16 and col. 6, line 30 to col. 7, line 50), and 3) the claimed a control circuit, coupled to said tuner and said carrier recovery circuit, for generating said first control and generating said second control signal after said carrier recovery circuit recovers the carrier frequency is met by the microprocessor 12 and digital processor 24 (Figs. 1 and 3, col. 3, line 1 to col. 6, line 29).

In considering claim 11, the claimed wherein said control circuit comprises an automatic gain control (AGC) controller is met by the AGC control and charge pump 31 (Fig. 2, col. 3, line 1 to col. 4, line 63).

Claim 12 is rejected for the same reason as discussed in claim 2.

Claim 13 is rejected for the same reason as discussed in claim 5.

In considering claim 14, the claimed wherein said tuner circuit comprises an intermediate frequency (IF) module is met by the IF amplifier 30 (Figs. 1-4, col. 3, line 1 to col. 6, line 29).

In considering claim 15, the claimed wherein a gain of said tuner circuit is increased upon receipt of the increased value of said control signal is met by when the integrated signal 76 below a second level, a Gain-Up signal is generated by decoder to increase the gain of amplifier 30 (Figs. 1-4, col. 3, line 1 to col. 6, line 29).

In considering claim 16, the claimed wherein a gain of said tuner circuit is decreased upon receipt of the decreased value of said control signal is met by when the integrated signal 76 exceeds a first level, a Gain-Down signal is generated by decoder to reduce the gain of amplifier 30 (Figs. 1-4, col. 3, line 1 to col. 6, line 29).

Claim 17 is rejected for the same reason as discussed in claim 9.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kim (US Patent No. 6,049,361) discloses automatic gain control circuit and method therefor.

Uskali et al. (US Patent No. 6,735,423 B1) disclose method and apparatus for obtaining optimal performance in a receiver.

Balaban et al. (US Patent No. 6,369,875 B1) disclose receiver for analog and digital television signals.

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Okada et al. (US Patent No. 6,333,765 B1) disclose television receiver having an AGC circuit to control the gain on a tuner.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (703) 305-0090. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT TT  
February 4, 2005

  
**JOHN MILLER**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**